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NOTICE OF ALLOWANCE AND FEE(S) DUE

22850 7590 03/10/2011

OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER	
LONG, SCOTT	
ART UNIT	PAPER NUMBER
1633	

DATE MAILED: 03/10/2011

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/534,538	10/31/2005	Yongzhi Xi	272331US0PCT	7166

TITLE OF INVENTION: FULL LENGTH POLYNUCLEOTIDE CODING CHICKEN TYPE II COLLAGEN AND THE USE OF IT

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	$1510	$300	$0	$1810	06/10/2011

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail **Mail Stop ISSUE FEE**
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INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

22850 7590 03/10/2011

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1940 DUKE STREET
ALEXANDRIA, VA 22314

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission
I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/534,538	10/31/2005	Yongzhi Xi	272331US0PCT	7166

TITLE OF INVENTION: FULL LENGTH POLYNUCLEOTIDE CODING CHICKEN TYPE II COLLAGEN AND THE USE OF IT

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	$1510	$300	$0	$1810	06/10/2011

EXAMINER	ART UNIT	CLASS-SUBCLASS
LONG, SCOTT	1633	514-012000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.

☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list

(1) the names of up to 3 registered patent attorneys or agents OR, alternatively,

(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1 _____
2 _____
3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) : ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:

☐ Issue Fee

☐ Publication Fee (No small entity discount permitted)

☐ Advance Order - # of Copies _____

4b. Payment of Fee(s): **(Please first reapply any previously paid issue fee shown above)**

☐ A check is enclosed.

☐ Payment by credit card. Form PTO-2038 is attached.

☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. **Change in Entity Status** (from status indicated above)

☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27.

☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature _____ Date _____

Typed or printed name _____ Registration No. _____

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/534,538	10/31/2005	Yongzhi Xi	27233IUS0PCT	7166

22850 7590 03/10/2011

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EXAMINER	
LONG, SCOTT	
ART UNIT	PAPER NUMBER
1633	

DATE MAILED: 03/10/2011

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)
(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Notice of Allowability	Application No.	Applicant(s)	
	10/534,538	XI ET AL.	
	Examiner	Art Unit	
	SCOTT LONG	1633	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *2/4/2011*.

2. ☒ The allowed claim(s) is/are *13 and 15-17*.

3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☒ All b) ☐ Some* c) ☐ None of the:
      1. ☒ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
   (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

/SCOTT LONG/
Primary Examiner, Art Unit 1633

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2/4/2011 has been entered.

Priority

This application claims benefit as a 371 of PCT/CN03/00967 (filed 11/14/2003). This application claims benefit from foreign patent application (CHINA) 02149375.8 (filed 11/14/2002). The instant application has been granted the benefit date, 14 November 2002, from foreign patent application (CHINA) 02149375.8.

RESPONSE TO ARGUMENTS

35 USC § 101 and § 112 (Lack of Utility)

The examiner withdraws the rejection of claims 12, 15 and 16-17 remain rejected under 35 U.S.C. 101 and 112, 1st paragraph due to the applicant's claim amendments. The applicant has cancelled claim 12, thereby making the pending rejection moot.

35 USC § 103

Vuorio, Young, Nah, Sandell1, Sandell2 and Upholt

The examiner withdraws the rejection of claim 13 under 35 U.S.C. 103(a) as unpatentable over Vuorio et al. (Nucleic Acids Research. 1982; 10:1175-1192) in view of Young et al. (Nucleic Acids Res. 1984; 12 (10), 4207-4228) in view of Nah et al. (Journal of Biological Chemistry. 1991; 266(34): 23446-23452) and further in view of Sandell et al. (Journal of Biological Chemistry. 1984; 259(12): 7826-7834) [known hereinafter as Sandell1] and further in view of Sandell et al. (Journal of Biological Chemistry. 1983; 258(19): 11617-11621) [known hereinafter as Sandell2] and further in view of Upholt et al. (PNAS. April 1986; Vol.83: 2325-2329) in response to the applicant's arguments.

The applicant's arguments have been fully considered and are persuasive. The applicant's arguments (Remarks, pages 8-9, filed 2/4/2011) are particularly persuasive, because despite assertions made by many of the cited reference that they had sequenced the chicken collagen cDNA, most references did not provide full disclosure of the full scope of the sequences which was contained in the cDNA the authors of the references had isolated. Therefore, the examiner agrees with the applicant that these references alone or together cannot make the claimed sequence obvious.

Therefore, the examiner hereby withdraws the rejection of claim 13 under 35 U.S.C. 103(a) as unpatentable over Vuorio et al. in view of Young et al. in view of Nah et al. and further in view of Sandell1 and further in view of Sandell2 and further in view of Upholt et al.

Vuorio, Young, Nah, Sandell1, Sandell2, Upholt & Matsumoto

The examiner withdraws the rejection of claims 15-17 under 35 U.S.C. 103(a) as being unpatentable over Vuorio et al. (Nucleic Acids Research. 1982; 10:1175-1192) in view of Young et al. (Nucleic Acids Res. 1984; 12 (10), 4207-4228) in view of Nah et al. (Journal of Biological Chemistry. 1991; 266(34): 23446-23452) and further in view of Sandell et al. (Journal of Biological Chemistry. 1984; 259(12): 7826-7834) [known hereinafter as Sandell1] and further in view of Sandell et al. (Journal of Biological Chemistry. 1983; 258(19): 11617-11621)) [known hereinafter as Sandell2] and further in view of Upholt et al. (PNAS. April 1986; Vol.83: 2325-2329) as applied to claim 13 above, and further in view of Matsumoto et al (US-6,010,722, issued 4 January 2000) due to the applicant's arguments.

As described above, the sequence of claim 13 is not obvious over the cited references. Therefore, the dependent claims likewise cannot be obvious.

Therefore, the examiner hereby withdraws the rejection of claims 115-17 under 35 U.S.C. 103(a) as unpatentable over Vuorio et al. in view of Young et al. in view of Nah et al. and further in view of Sandell1 and further in view of Sandell2 and further in view of Upholt et al. as applied to claim 13 above, and further in view of Matsumoto et al.

Reasons for Allowance

The following is an examiner's statement of reasons for allowance:

The prosecution history provides evidence for allowability.

Claim 13 is directed to an isolated polynucleotide comprising SEQ ID NO:2.

The specification indicates that the full length type II chicken collagen cDNA is 4837bp and consists of an open reading frame (ORF) of 4260bp and a 3' nontranslated region of 520bp. The examiner notes that instant SEQ ID NO:2 is 4793bp. The specification inaccurately indicates that SEQ ID NO:2 is the mature chicken collagen II polypeptide (page 12, paragraphs 2-4). The examiner has provided a sequence alignment between the full length type II chicken collagen cDNA as provided by EMBL accession number AY046949 and instant SEQ ID NO:2. The examiner has provided a sequence alignment between the full length type II chicken collagen cDNA as provided by EMBL accession number AY046949 and full length type II chicken collagen cDNA as provided by GenBank accession number NM_204426.1 and instant SEQ ID NO:2. This alignment shows that EMBL and GenBank versions of full length chicken collagen cDNA are identical. However, the alignment also demonstrates that SEQ ID NO:2 differs from the cDNA for chicken type 2A1 collagen (as provided by EMBL or Genbank). The differences being (1) SEQ ID NO:2 lacks 44 nucleotides at the 5' end of CCOL2A1 cDNA and (2) that SEQ ID NO:2 has a single nucleotide change which results in a single Alanine to Threonine amino acid mutation at amino acid 24. Therefore, SEQ ID NO:2 encodes a mutant form of chicken type II (α1) collagen. Both the specification and art indicate that the cDNA for chicken type 2A1 collagen encode a

1420 amino acid protein. Therefore, the differences between the lengths of SEQ ID NO:2 and the cDNA for chicken type 2A1 collagen and 4260bp needed to encode a 1420 protein is due to both 5' and 3' untranslated nucleotides.

The sequence disclosed by EMBL accession number AY046949 comprises the full length cDNA sequence of chicken type 2A1 collagen. EMBL accession number AY046949 (submitted 11 September 2001) was publically available in the European Molecular Biology Laboratory (EMBL) database more than one year prior to the earliest priority date of the instant application. Therefore, it would be available as 35 USC 102(b) art if not for the "typographical error" in SEQ ID NO:2 which resulted in single nucleotide base difference from the EMBL sequence, such that SEQ ID NO:2 encodes a mutant form of chicken type II (α1) collagen.

By the time the applicant submitted SEQ ID NO:2, all the nucleotides of this sequence were known, with the exception of the point mutation resulting in a A24T mutation difference from chicken COL2A1 polypeptide. As the cDNA sequence submitted to GenBank by the applicant in association with subsequent publication of their work on molecular cloning, characterization and localization of chicken type II procollagen gene (Xi et al. *Gene*. 2006; 366: 67-76) did not maintained this anomalous mutation, the examiner presumes that the specification contains a typographical error. In addition, instant SEQ ID NO:3 (indicated as encoding the polypeptide of chicken collagen, type 2A1), does not contain the A24T mutation. Therefore, the examiner is further persuaded that nucleotide 70 of SEQ ID NO:2 is a typographical error. In addition, the applicant is on record (see various 1.132 Declarations by Dr. Xi) that the

earliest submission to Genbank of the polynucleotide sequences encoding type II chicken collagen contained sequences which differed from the final submission. Therefore, the examiner presumes that instant SEQ ID NO:2 contains such a (typographical) error.

Therefore, the basis for the allowance is that SEQ ID NO:2 encodes a single nucleotide difference from the publically available full length cDNA of chicken collagen, type II (α1). This single nucleotide difference results in SEQ ID NO:2 encoding a mutant form of chicken type II (α1) collagen. This minor change is non-obvious. The examiner could not devise a scientifically logical rationale to make this specific modification. However, the examiner notes that he believes making recombinant chicken collagen, type II (α1) using the polynucleotide provided by EMBL accession number AY046949 comprising the full length cDNA sequence of chicken type 2A1 collagen would not infringe the scope of the allowed claims.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Claims 13 and 15-17 are allowed.

Examiner Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Scott Long** whose telephone number is **571-272-9048**. The examiner can normally be reached on Monday - Friday, 9am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Joseph Woitach** can be reached on **571-272-0739**. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/SCOTT LONG/
Primary Examiner, Art Unit 1633